

A solid teal border surrounds the entire slide content.The background of the slide features a dense, close-up photograph of green plants with fan-shaped leaves, possibly a type of philodendron or similar tropical foliage, which is slightly faded to allow the text to be visible.

# Voluntary Beyond Codes

2001 National Workshop on  
State Building Energy Codes

**Development Center for  
Appropriate Technology**  
**[www.dcat.net](http://www.dcat.net)**

# Presentation Overview

- **Challenge: Lack of a sustainable context for building codes resulting in resistance to adoption and enforcement of building energy codes and greater resistance to alternative designs, materials, and methods**
- **Limitations for building departments**
- **Potential for green building programs to provide support for building departments**
- **Vision of potential solutions**

# Building Sustainability into the Codes

**A three phase program:**

- **Awareness building - the need for change**
- **Capacity building - enabling the change**
- **Transfer of responsibility - shifting the work to those that have a natural and legitimate responsibility to carry it out**

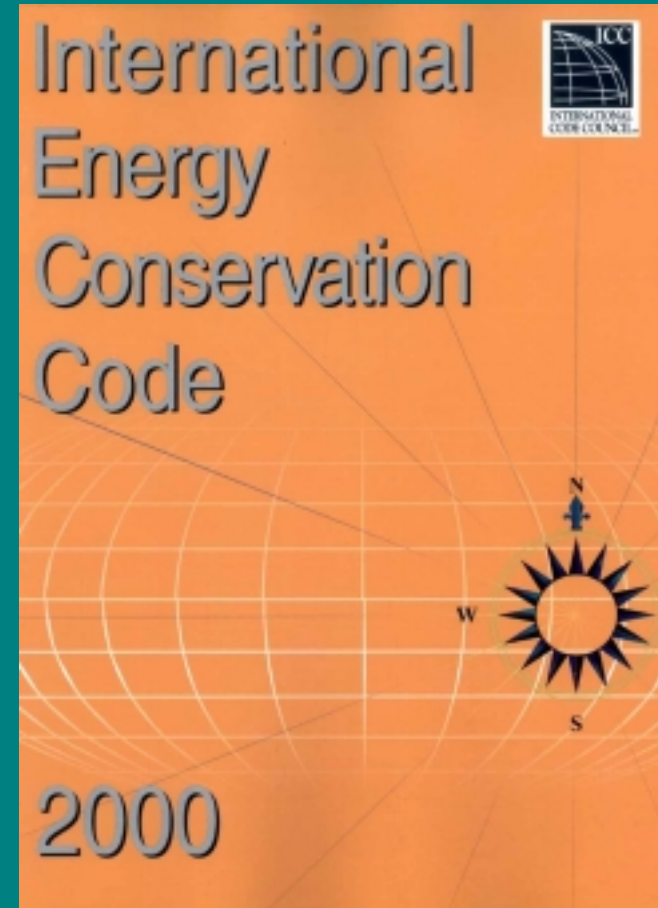
# Misalignment

Building codes community often resists energy codes and alternatives due to a *perceived* lack of alignment with the purpose of codes.

# Example of Misalignment: Energy Codes

## Perception:

Energy codes have nothing to do with life safety and therefore are merely a complex, time-consuming, expensive source of continuing aggravation.



## **Potential Solution:**

**Define a context for viewing energy codes and alternatives as part of the central responsibility for protecting public safety, health, and welfare.**

# The Basic Premise

**IF building codes and regulations are designed protect public from the built environment**

**BUT INSTEAD they inadvertently jeopardize the health, safety, and welfare of everyone by encouraging the destruction of the natural systems on which we depend for our survival**

**THEN we are *obligated* to reinvent our regulatory systems**

***It cannot be more important to protect individuals in and around specific buildings than all of us collectively on this planet.***



# A New Context for Codes

- Sphere of concern: those things which must be attended to in order to protect people from the built environment.
- Sphere of consequence: all the outcomes resulting from the actions taken in accordance with the sphere of concern.
- Sphere of responsibility: we are responsible for what happens as a result of what we require people to do.

*Expand spheres of awareness and concern to encompass as much as possible of the larger spheres of consequence and responsibility.*



# The Work

**Provide a context that aligns purpose of codes with sustainability issues through:**

- Education about the larger, negative impacts of buildings and building practices as well as about alternative approaches that minimize these impacts**
- Training to enable change**
- Development of partnerships, e.g. green building programs, ICBO, USGBC, etc.**

# **Brief Overview of Green Building Programs**

# Green Building Programs: Organizational Frameworks

- Non-profits
- Municipal
- State
- Home Builders Association
- Utilities (energy guarantees)



# Green Building Program Components

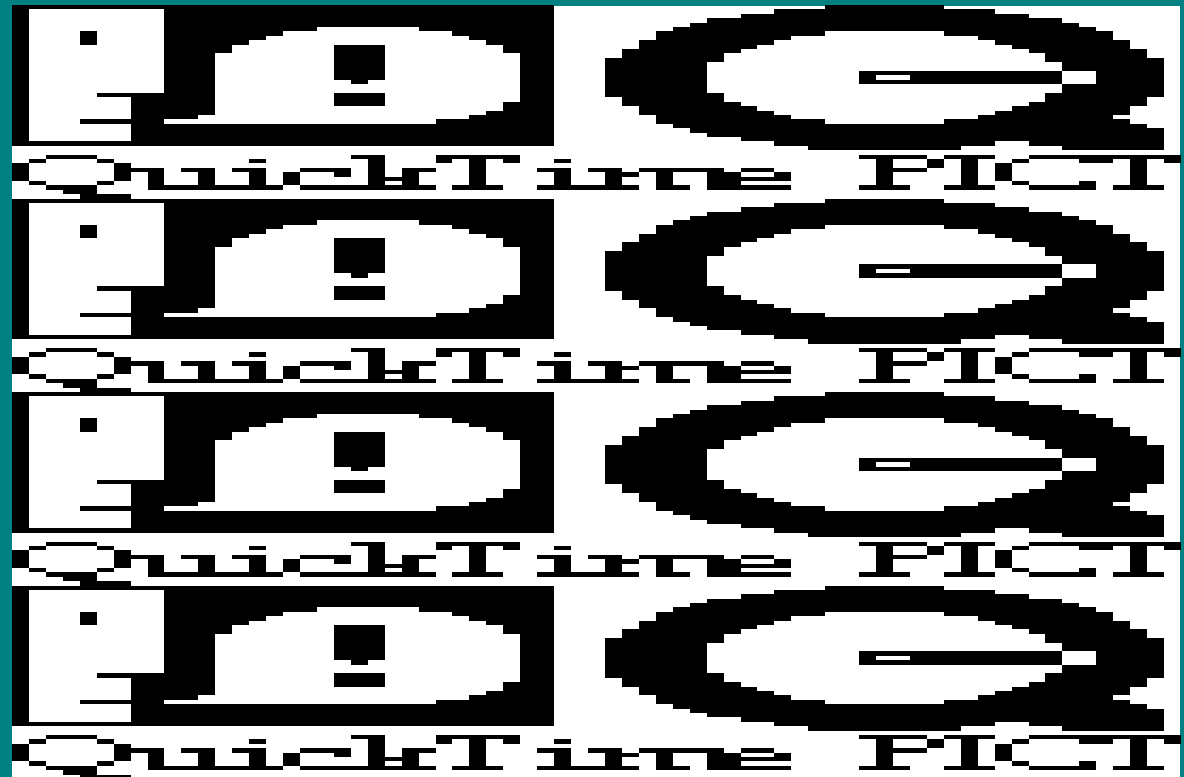
- Education
- Training
- Consulting
- Certification
  - Checklist
  - Multi- or single-level



# Green Building Program

## Target Areas

- Energy
- Site design
- Materials
- Water
- Solid Waste
- Community
- Health



# Benefits of Green Building Programs

- **Market-based incentive**
  - Meets demand
  - Creates demand
  - Additional marketing strategy
- **Provide standards above minimum requirements of codes**
- **Defines and educates what makes a “green” building**

# **Common Realities for Building Departments**



# Limitations

- **Workloads and ordinary problems for conventional construction are typically demanding enough**
- **Limited or no time to be pro-active in addressing these challenges**
- **Added complexity usually just amplifies the problem**

**Continued...**

# Limitations, continued

- **Inadequate information and training to be able to deal with alternatives in a positive way**
- **Limited funding and staff for training**
- **Limited positive feedback, support, or cooperation from the design and building sectors**

# Sources of resistance

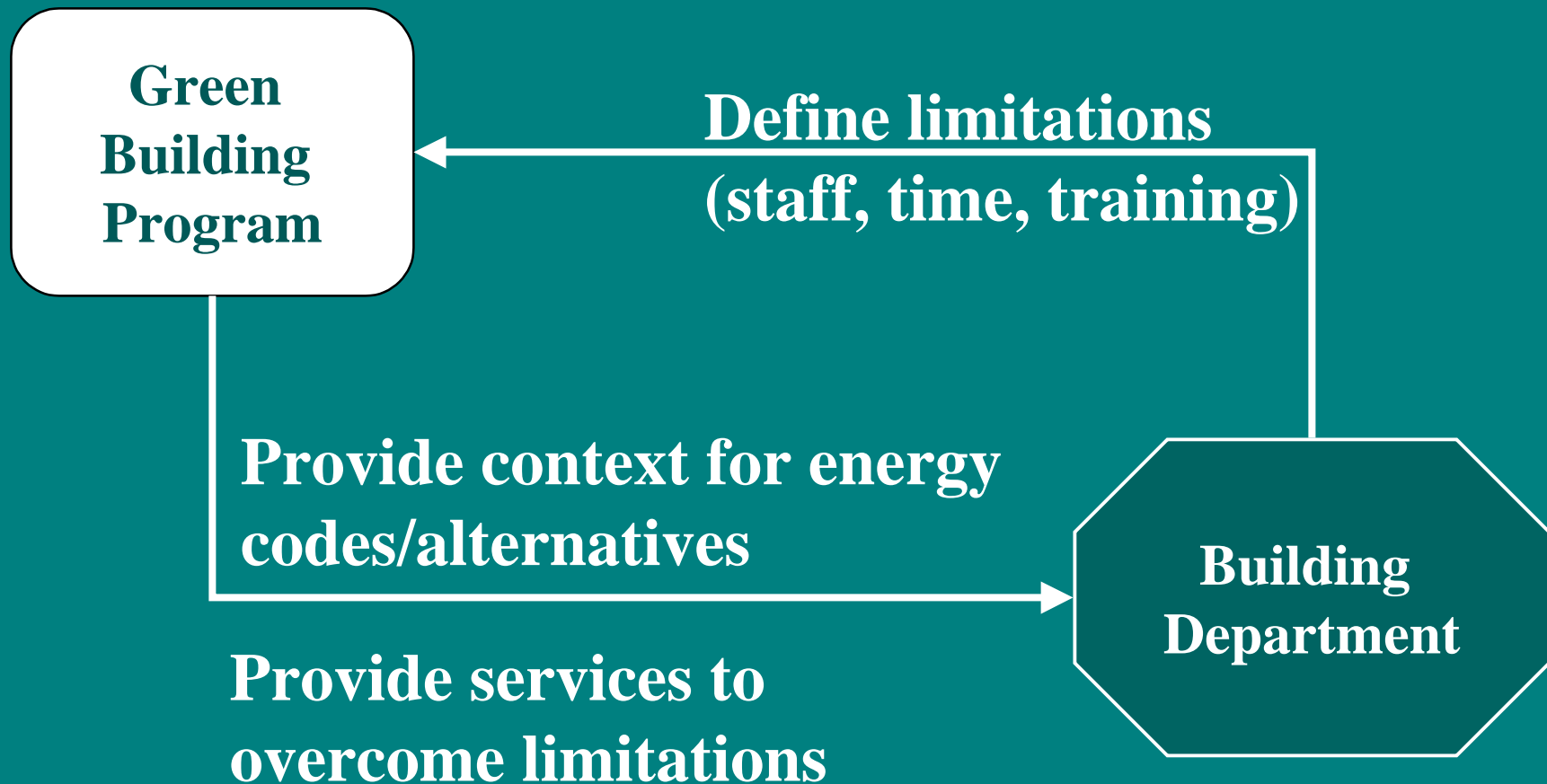
- **Risk:** not only physical risk as from unsafe structures, but risk of future problems, risk of liability to jurisdiction, etc.
- **Dealing with the unfamiliar or unknown increases both real and perceived risk**
- **Little incentive for building officials to take added risks**
- **Effort and resources are necessary to overcome these limitations**

**Alignment Through  
Relationship Between  
Green Building Programs and  
Building Departments**

# **A Potential Solution: Services Provided by GBP**

- **Staff support within the building department for green projects**
- **Streamlined checklists and guidance for plan review and inspection for alternatives**
- **Information resources and training for both code officials and proponents of alternatives to facilitate the approval and inspection processes**
- **Green plan review**

# Relationship of GBPs and Building Departments



# Imagine

- High-quality private plan review services for green buildings and high-performance designs
- Expedited plan review for green projects as an incentive for builders to participate in green building programs
- A building department member of the design team in integrated design projects, whereby all code compliance issues could be resolved and a permit issued as the final plans are submitted to the building department



# Imagine

- Building departments becoming real resource centers for communities rather than the “building police”
- Building codes and building departments shifting their role from making sure that the wrong things don’t happen to ensuring that the right things do - there is a big difference!



Please remember  
to fill out our  
building codes  
survey at  
[www.dcat.net](http://www.dcat.net)

Thank You!

